

Lesson 4

Length Conversions

- Convert 27 inches to centimetres.

$$\begin{aligned}\frac{y}{27\cancel{in}} &= \frac{2.54\text{ cm}}{1\cancel{in}} \\ \frac{y}{\cancel{27in}} \times \cancel{27in} &= \frac{2.54\text{ cm}}{1\cancel{in}} \times 27\cancel{in} \\ y &= 68.58\text{ cm}\end{aligned}$$

There are 68.58 centimetres in 27 inches.

- Convert 10 metres to yards.

$$\begin{aligned}\frac{y}{10\cancel{m}} &= \frac{1.094\text{ yd}}{1\cancel{m}} \\ \frac{y}{\cancel{10m}} \times \cancel{10m} &= \frac{1.094\text{ yd}}{1\cancel{m}} \times 10\cancel{m} \\ y &= 10.94\text{ yd}\end{aligned}$$

There are approximately 10.94 yards in 10 metres.